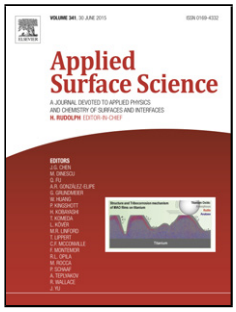
Accepted Manuscript



Title: Molten salt-mediated formation of g-C_3N_4-MoS_2 for visible-light-driven photocatalytic hydrogen evolution

Authors: Ni Li, Jing Zhou, Ziqiong Sheng, Wei Xiao

PII: S0169-4332(17)32421-2
DOI: http://dx.doi.org/doi:10.1016/j.apsusc.2017.08.086
Reference: APSUSC 36923

To appear in: *APSUSC*

Received date: 17-5-2017
Revised date: 7-8-2017
Accepted date: 11-8-2017

Please cite this article as: Ni Li, Jing Zhou, Ziqiong Sheng, Wei Xiao, Molten salt-mediated formation of g-C3N4-MoS2 for visible-light-driven photocatalytic hydrogen evolution, Applied Surface Sciencehttp://dx.doi.org/10.1016/j.apsusc.2017.08.086

Molten salt-mediated formation of g-C_3N_4-MoS_2 for visible-light-driven photocatalytic hydrogen evolution

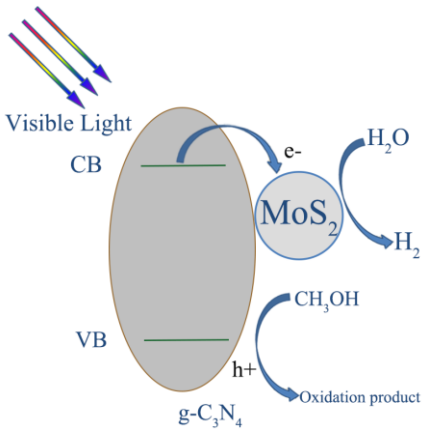
Ni Li, Jing Zhou, Ziqiong Sheng and Wei Xiao*

School of Resource and Environmental Sciences, Hubei International Scientific and Technological Cooperation Base of Sustainable Resource and Energy, Wuhan University, Wuhan 430072, PR China.

Tel./Fax: +86-27-68775799; http://wxiao.whu.edu.cn/

* Corresponding authors: gabrielxiao@whu.edu.cn (W.X.)

Graphical abstract



Highlights

- Molten salt preparation of 2D g-C_3N_4 and 2D/2D g-C_3N_4-MoS_2 is reported.
- Molten salts are ideal reaction media for formation of homogeneous 2D/2D hybrid.
- Strong interaction between C_3N_4 and MoS_2 exists in the g-C_3N_4-MoS_2 hybrid.
- Enhanced visible light photocatalytic H_2 evolution activity appears in the hybrid.